Abstract of the Disclosure

Title: ELECTROCHEMICAL TREATMENT OF AMMONIA IN WASTE-WATER

In a sewage treatment plant, dissolved ammonium is extracted from the waste-water stream, and is transferred to a body of secondary water. The secondary water is passed through an electrolysis station, where the ammonium is transformed to nitrogen gas. The capture and transfer can be done by ion-exchange, the electrolysis then being done on the regenerant water. Or the capture and transfer can be done by first transforming the dissolved ammonium to ammonia gas by raising the pH of the waste-water, then passing the ammonia gas through acidic secondary-water, in which the ammonia dissolves, the electrolysis then being done on the acid-water. The electrolysed, ammonium-diminished, secondary-water can be re-used in further capture/transfer episodes. The secondary-water does not mix with the waste-water stream.

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